AMENDMENTS TO THE CLAIMS

1. (previously presented) A laser-programmable fuse structure for an integrated circuit device, comprising:

a conductive layer, said conductive layer completing a conductive path between wiring segments included in a wiring layer; and

an organic material encapsulated underneath said conductive layer and in continuous contact with said conductive layer;

wherein the fuse structure is blown open by application of a beam of laser energy thereto.

2. (original) The fuse structure of claim 1, further comprising:

a liner material in electrical contact with said wiring segments and said conductive layer, said liner material further encapsulating said organic material between said wiring layer and said conductive layer.

3. (original) The fuse structure of claim 1, wherein said organic material is selected from a group that includes a polyimide, a polyamide, a polyarlyene ether, a polyaromatic hydrocarbon (PAH), and a conductive polyaniline.

4. (previously presented) The fuse structure of claim 2, wherein said liner material is selected from a group that includes TaN, Ta, TiN, Ti, W, WN, TaSiN, TiSiN, or alloys therefrom.

5. (original) The fuse structure of claim 1, wherein said conductive layer is selected from a group that includes TaN, Ta, TiN, Ti, W, WN, TaSiN, TiSiN, or alloys therefrom.

6. (original) The fuse structure of claim 2, further comprising:

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a pair of vias formed within an insulating layer and extending down to said wiring segments; and

a mesa region of said insulating layer formed between said pair of vias;

wherein said liner material is formed upon sides of said mesa region and said wiring segments.

7. (original)   The fuse structure of claim 6, wherein said pair of vias is filled with said organic material.

8. (original)   The fuse structure of claim 7, wherein said organic material further occupies an inner area of the fuse structure, said inner area between the top of said mesa region and said conductive layer.

9. (original)   The fuse structure of claim 8, wherein said conductive layer covers said inner area and said organic material, thereby completing said conductive path.

10. (withdrawn)   A method for forming a laser-programmable fuse structure for an integrated circuit device, the method comprising:

forming a conductive layer to complete a conductive path between wiring segments included in a wiring layer; and

encapsulating an organic material underneath said conductive layer;

wherein the fuse structure is blown open by application of a beam of laser energy thereto.

11. (withdrawn)   The method of claim 10, further comprising:

forming a liner material in electrical contact with said wiring segments and said conductive layer, said liner material further encapsulating said organic material between said wiring layer and said conductive layer.

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12. (withdrawn) The method of claim 10, wherein said organic material is selected from a group that includes a polyimide, a polyamide, a polyarlyene ether, a polyaromatic hydrocarbon (PAH), and a conductive polyaniline.

13. (withdrawn) The method of claim 10, wherein said liner material is selected from a group that includes TaN, Ta, TiN, Ti, W, WN, TaSiN, TiSiN, or alloys therefrom.

14. (withdrawn) The method of claim 10, wherein said conductive layer is selected from a group that includes TaN, Ta, TiN, Ti, W, WN, TaSiN, TiSiN, or alloys therefrom.

15. (withdrawn) The method of claim 11, further comprising:

forming a pair of vias within an insulating layer, said vias extending down to said wiring segments; and

a mesa region of said insulating layer thereby being formed between said pair of vias;

wherein said liner material is formed upon sides of said mesa region and said wiring segments.

16. (withdrawn) The method of claim 15, further comprising filling said pair of vias with said organic material.

17. (withdrawn) The method of claim 16, wherein said organic material further occupies an inner area of the fuse structure, said inner area between the top of said mesa region and said conductive layer.

18. (cancelled)

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